Second Edition



## PROMOTING Healthy BEHAVIOUR

### A PRACTICAL GUIDE

Dominic Upton & Katie Thirlaway



#### **Promoting Healthy Behaviour**

There is ever growing recognition by governments and healthcare professionals of the need to respond to the challenges of preventable diseases, especially so-called 'lifestyle diseases', and of the influence that social class, gender, ethnicity, as well as individual differences play in health. This text explores the fundamental importance of psychology in the development of these lifestyle diseases, and how an understanding of psychological models is essential for the healthcare practitioner to predict behaviours and develop evidence-based interventions.

This thoroughly updated edition includes new chapters looking at health inequalities, health promotion, working with special populations and understanding the role of social and psychological factors in some common conditions. These four additional chapters will enable the reader to better understand the place of lifestyle change within wider society. Beginning with an introduction to healthy behaviour and the context that health practitioners work in, the book goes on to look at issues, including:

- The role of psychology in lifestyle change
- Diet, alcohol, smoking and active lifestyles
- Sexual behaviour
- Chronic illness and vulnerable populations.

Each chapter includes key features including learning objectives, case studies, key points and discussion questions, as well as how to apply the various research and theories to practice. *Promoting Healthy Behaviour* is a practical and informative guide for your practice both now and in the future, and is invaluable reading for healthcare professionals at any stage of their careers.

Dominic Upton is Professor of Health Psychology at the University of Worcester, UK.

Katie Thirlaway is Head of Applied Psychology at Cardiff Metropolitan University, UK.

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### **Promoting Healthy Behaviour**

A Practical Guide

Second edition

**Dominic Upton and Katie Thirlaway** 



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## Preface

#### **Background to this book**

In 2010 the first edition of this text was published in response to the growing recognition that health practitioners needed to respond to the challenges of preventable disease with more than just education and advice. During the three years between editions there have been concerted efforts by governments and practitioners to encourage healthy lifestyles and prevent or delay the onset of so called 'lifestyle diseases'. Some initiatives have shown promise whilst others have been less successful but the real benefits of our efforts to improve our lifestyles are unlikely to be seen at a population level for at least a decade. Nevertheless, it was clearly time to update and reflect on what we have learnt during the three years since the first edition of the book. In addition to updating all the original chapters we have included four additional chapters on healthy inequalities, health promotion, working with special conditions and working with special populations. We hope that these four additional chapters will enable the reader to better understand the place of lifestyle change within wider society.

The rationale for this book remains the same as the first edition: 'lifestyle diseases' are one of the major challenges facing the NHS. This is not a supposition put forward by us exclusively but by many others, including not least the former prime minister, Tony Blair (Blair, 2006). Of course, politicians are not the only ones to have entered the debate. Opinion formers, academics and leader writers have all contributed to the debate, with increasing attention given to these diseases, whether this be within academia, social policy or the media. We and many others have long recognised the importance of psychology in the development of these lifestyle diseases and we wanted to ensure that appropriate psychological theory and practice were discussed and disseminated for use as part of the armoury available for healthcare professionals.

It has been appreciated for some time that poor lifestyles are associated with increasing health risk – at both an individual and a population level. Of course, such diseases are not distributed evenly across the population; there are certain sections of society that may suffer more than others. Hence, the influence of social class, gender and ethnicity should not be overlooked. It is essential that all healthcare professionals take into account these variables when discussing some of the approaches in this text. Furthermore, it is

obvious that cognisance has to be taken of the individual differences when in a clinical situation; the personal characteristics and situation of the individual client can have a significant bearing on an individual's health and lifestyle. These characteristics may be related to their current situation or may be related to more cultural aspects. Moreover, there are differences between the individual countries of the UK, with certain behaviours and health and illnesses more prominent in some areas compared to others. There are also psychological variables that may be described as either 'risk' factors or 'protective' factors – 'personality' variables, self-efficacy or mood, for example.

Psychological models have attempted to integrate all of these social, demographic and psychological variables to predict behaviours and develop theoretically based interventions. This has been the fundamental foundation of this text. We have tried to demonstrate the value of these psychological models and how they can be used practically by healthcare professionals.

We see the role of psychology in lifestyle as of significant, if not of primary, importance. Similarly, we see the role of lifestyle in health and in illness as predominating and likely to become ever more important to the NHS in the coming decades. Indeed, the Foresight report described the 'obesity epidemic' as a problem comparable to climate change (Jones *et al.*, 2007). Obviously, how these issues are going to be addressed is a matter of debate and potential solutions range from the theoretically driven to the more light-hearted. Lifestyle is an issue about which every commentator feels confident to express an opinion. For example, the stigmatisation of obese people (albeit in, one would assume, a humorous article) is not uncommon: 'Most obesity is a consequence of stupidity and indolence and not of some genetic affliction. It is a lifestyle choice which people would be less inclined to adopt if they knew we all hated them for it' (Liddle, 2008). In this text, we review some of the more serious and theoretically driven approaches, debate their value and discuss the potential ways that healthcare professionals can use these for the benefit of their patients and clients.

Overall, we hope that you find this book useful and informative and a guide for your practice both now and in the future. It is geared towards healthcare professionals at any stage of their careers: those wishing to enter a health education/promotion, health (or social) care profession, those new to their particular role and those who have been engaged in professional practice for a number of years but wish to enhance their practice. It is not a manual of tips or a series of laws that have to be followed by all. There are some methods and guiding principles that we hope you will find useful, but this text is intended to be a series of thought-provoking chapters that will intrigue, stimulate and provoke, and hopefully enhance your practice for the benefit of your patients and clients.

#### The content of this book

We thought for some time about the content of this book – what should we include and what should be excluded? We also had advice from others who suggested additional material, but then others suggested other forms of behaviour that could be included. For example, should we include sleeping? After all, it is a behaviour and can affect health either positively or negatively. Similarly, others considered that we should include stress, which can impact on both mental and physical health and contributes significant mortality through accidents. In the first book we included a chapter on drug taking but for the second edition decided to concentrate on the five main behaviours that are the focus of the majority of health promotion activities.

We also knew the psychology that needed to be included. So what was the cause of our consternation? Why did we spend so much time discussing the content over wellbrewed coffee (other than the obvious)? We appreciated at the outset that there was a possibility of considerable repetition within this text. Many of the behaviours discussed are underpinned by similar psychological variables and have been investigated within similar theoretical modes. After writing the first couple of chapters we recognised this and re-jigged the book to include the chapter on psychological concepts, which presents the information in a more coherent and sensible manner. We hope that this has removed considerable overlap, although we recognise that there are key psychological principles and models which will play a central part in many of the behaviours we discuss. For the second edition we have included new chapters that consider more carefully who is responsible for promoting lifestyle change, how we address inequalities and the implications of lifestyle change in different groups of people.

We should emphasise at the outset that this is not a book about smoking or obesity or psychological concepts *alone*. It is a book that attempts to cover a range of topics in an integrating framework. Hence, there are sections on social support, for example, that some may consider skimpy, and there are psychological factors and models that could have been included in many more chapters than currently presented. We have done this on purpose – we have not written a book that is dedicated to any one behaviour or any one approach. We obviously cannot compete with more narrowly focused texts for specific behaviours or models. However, we present an overview with a thematic connection between the chapters which we hope readers will find interesting, thought provoking and, most importantly, of practical use.

#### Chapter 1: Introduction to healthy behaviour

In this opening chapter we set the context within which health practitioners are working and individuals are making choices about how they behave. We look historically at the socio-cultural climate in which we all operate, considering how and why lifestyle diseases and related behaviours have become so pertinent for us in the twenty-first century. We also consider the political imperative to encourage individual responsibility for long-term health and we reflect on the environmental influences over twenty-first century lifestyles.

#### Chapter 2: Health promotion

In this chapter we introduce the concept of health promotion, health education and health literacy and where these various activities sit within public health. The chapter considers who is responsible for health promotion and how the health promotion priorities for a community are established.

#### Chapter 3: Health and health inequalities

Inequalities in health are apparent in practically all societies across the world. In the developed world, and in the UK in particular, these inequalities can be significant. This chapter explores these inequalities with a particular focus on socio-economic differences in health. Prior to this, however, a brief overview is provided on defining health, measuring health and measuring socio-economic status and deprivation.

#### Chapter 4: Psychology in practice

In this chapter we describe a number of key psychological concepts that are of relevance to the topic of lifestyle and lifestyle change. There are a great many theories of behavioural change, many of which include similar psychological concepts in different theoretical frameworks. The decision not to introduce specific theories but rather to introduce the key concepts that have consistently proved relevant for behavioural change is an attempt to bridge the gap between theory and practice. It is intended to make identifying the key aspects of research relevant to practice simpler. However, this is in no way intended to undermine the importance of theory, and the chapter highlights further reading that will enable interested readers to gain greater insight into the psychological theory that underpins these concepts. The existence of a large number of theories of behavioural change has been beneficial to our understanding of how and why people change their behaviour. It has enabled us to identify and understand those factors we might have expected to be important but are not, and those factors that are important in behavioural choices. However, it does make exploring the psychological research into behavioural change somewhat daunting for non-psychologists, so this chapter hopes to make the key psychological concepts to date easier to identify.

#### Chapter 5: Eating well

In this chapter we explore eating and diet. The problems in providing a clear message of a 'healthy diet' are stressed, as are the issues surrounding the social environment impact on diet. The governmental approaches to the 'obesity epidemic' are outlined and the role of psychological models in the development of appropriate interventions is stressed – ultimately, what the healthcare professional can do to promote healthy eating in those who are currently overweight, and how healthy eating can be promoted in the young.

#### Chapter 6: Being active

In this chapter we consider the predominance of sedentary lifestyles in the population. Physical activity is the output side of the input–output energy equation and so is a key factor in the rising levels of obesity. The role of the obesogenic environment and how psychological interventions can work in such adverse environmental conditions are explored.

#### Chapter 7: Sensible drinking

Drinking is a popular component of many aspects of leisure in Britain. Drinking has adverse consequences for social and physical well-being. The changing nature of drinking patterns in the UK and in particular in women is described and discussed. Government policies to establish healthy drinking patterns in the young and promote healthy drinking in adults are outlined and the role of psychological interventions to support healthy drinking and deter deleterious drinking is evaluated.

#### Chapter 8: Smoking

The health consequences of smoking are well established and well known throughout the population – smoking can have a significant impact on morbidity and mortality. However, approximately a quarter of the population still smokes and this has a significant impact on both the individual and the country's health. Given the significant impact that smoking has on the health of the nation, there has been extensive research into smoking and much of this has a psychological nature. In this chapter, the psychological variables and models that have been applied to smoking and, more importantly, how they can be used to promote smoking cessation are discussed.

#### Chapter 9: Sexual activity

The safe sex message is being promoted in order to reduce the spread of sexually transmitted diseases. Sexual behaviours are not simply a consequence of physiological drives, but there are social, emotional and cultural (to name but three) variables that influence such behaviour. Within these broader influences the psychological factors have to be appreciated and developed. These psychological models and how they can be applied to promote safer sex are discussed. Importantly, safer sex is discussed within a pleasure-promoting context rather than a fear-inducing one.

#### Chapter 10: Special conditions

Increasingly it is acknowledged that healthy lifestyles are as relevant (if not more so in some cases) for individuals diagnosed with chronic conditions as they are for individuals with no diagnosed condition. Recommending and supporting lifestyle change for individuals with a chronic condition requires health practitioners to consider any particular risks and associated amendments to standard advice that different conditions indicate. For some conditions there are specialist lifestyle support courses available.

This chapter considers four different chronic conditions: type 2 diabetes; coronary heart disease; mental health; and chronic obstructive pulmonary disease.

#### Chapter 11: Special populations

Although approaches to lifestyle behaviour change are common across all the population, there are specific groups that require targeted interventions. These groups are numerous across the population but this chapter will explore three specific groups: those with a learning difficulty, those in prison and the elderly. To a large degree, these were selected at random but are there to exemplify the skills, attributes and targeted interventions required to alter unhealthy health behaviours.

#### Chapter 12: Conclusion

This final chapter attempts to draw together the diverse behaviours discussed in the previous chapters and identify the key similarities and differences in the various behaviours we have considered. It is crucial for health practitioners to recognise which psychological techniques are effective across all behaviours in order to enable them to deal more effectively with the various prevention and promotion targets they are required to meet. This final chapter also tries to look ahead and identify what else we need to know to make our interventions more effective.

For each of these chapters we have included a selection of the following features:

- *Learning objectives:* what you will find in this book, so that you can navigate your way through the text and know what to expect and what you can achieve.
- *Case study:* We provide a brief case study that highlights some key principles to be discussed later in the chapter. In some of these you are asked to take the role of the individual practitioner dealing with the client and we hope that this will highlight issues that you may face in practice (or have faced), whether this be as a qualified or student healthcare professional. We hope that the case study will raise questions and issues that we address later in the chapter.
- *Introduction:* the introduction follows the case study we hope that the case study has whetted your appetite and you will begin to appreciate during the chapter the importance of the case study and how it relates to the chapter content.
- *Applying this to ...:* at stages throughout the chapter a box highlights how the principles discussed in the text can be applied to the case study.
- *Applying research in practice:* in the chapter, empirical research studies are presented throughout to demonstrate the evidence base of the suggested techniques. More detail on a couple of these is provided in these boxes.
- Working with others: each chapter will consider the other professionals who may also be involved with or could support you in your health promotion activities.
- *Key points:* at the end of chapter the key points will be summarised.
- *Discussion points:* these act as points for discussion they relate either to all of the chapter content or to the case study highlighted at the outset.

We hope you are interested and engaged in this book and that it leads to an enhancement of your personal and professional skills. Overall, we hope that it leads to an improvement in healthy behaviours in your client group and goes some way to reducing the immense health problems associated with a poor lifestyle currently evident in the UK today.

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## Acknowledgements

Both of us have spent considerable time on this project, collating, reading and reviewing research articles and textbooks before trying to develop the material into a series of practical chapters that could assist and develop an individual professional's practice. The material we have read has not only been presented by psychologists but also by those from the wider academic community, including those from healthcare, medicine, sociology, philosophy and policy developments. We have tried to encompass the literature from both an academic and a practitioner basis. We thank the researchers, clinicians and policy makers for all this work and the contributions they have made to the current knowledge base.

On a more personal level, several key colleagues have acted as researchers and reviewers for us and have contributed their time, effort and opinions with vigour and a frankness that was as refreshing as it was useful. Particular mention should go to Helena Darby (for DU) and Lindsey Davies (for KT) who made a significant contribution to the new chapters in this second edition ensuring it is not only completely updated but also a more wide-reaching and comprehensive text. Thanks also to Helen Campling for her essential work on the figures and diagrams (KT).

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# 1

## Introduction to healthy behaviour

#### Learning objectives

At the end of this chapter you will:

- recognise how the concepts of lifestyle diseases and lifestyle behaviours have arisen
- understand the health behaviours central to the development and progression of chronic diseases
- recognise why lifestyle change is so complex and difficult
- recognise the multiple influences on lifestyle choice
- understand the challenges for health professionals involved in health promotion.

Health professionals and particularly primary care practitioners have health promotion and disease prevention as a central aspect of their role. This book is about this central element of a healthcare professional's role. Although lifestyle change should be a key part of *all* health professionals' role, and this has been recognised for many decades, in recent years its importance has moved higher up the policy hierarchy. For example, the then prime minister of the UK, Tony Blair, in 2006 called for 'lifestyle change' to relieve the pressure on the National Health Service (BBC News, 2006): the prime minister suggested that 'failure to address bad lifestyles was putting an "increasing strain" on the health service'. The impact of this key message, the role of lifestyle in health, has been significant. Many health professionals now provide the patients and clients who come into their clinics with expert advice about lifestyle behaviours and health. The frustration and disillusionment that are felt when advice is ignored and patients go on to develop chronic diseases that could probably have been avoided are among the motivating factors for this book. This frustration is frequently articulated by health professionals involved in treating the major lifestyle diseases of the twentieth century. In 2009, Professor Wiseman, medical and scientific adviser for the World Cancer Research Fund, said:

This means that we are now more sure than ever before that by limiting the amount of alcohol they drink, maintaining a healthy weight and being physically active women can make a significant difference to their risk. We estimate over 40% of breast cancer cases in the UK could be prevented just by making these relatively straightforward changes.

#### Wiseman (2009)

Lifestyle change is a tantalising solution to the chronic ill health that is the scourge of modern societies. It is such a cheap, effective, non-toxic, low-risk solution to the rising incidence of heart disease, diabetes, chronic back pain, cancers and many other conditions that it can seem incredible that we have not been able to deliver widespread population change. This book does not present a method to effect instant population-wide uptake of health advice but it does explain why changing lifestyle behaviours is so difficult for so many people and not quite as straightforward as Professor Wiseman suggests. Furthermore this book points the reader in the direction of techniques and interventions proven to have at least some success in increasing the likelihood of successful behavioural change.

So what are the key health behaviours that the government would like us to change? The word lifestyle is used confidently by health professionals, the media and individuals but what does it mean and which health behaviours are included under its umbrella? Initially, the medical profession started to refer to 'lifestyle diseases' to reflect the role that lifestyle choices play in certain diseases. Doyle (2001) suggested that the six major lifestyle diseases are coronary heart disease, stroke, lung cancer, colon cancer, diabetes and chronic obstructive pulmonary disease. The rationale for their inclusion is that they 'trace mainly to imprudent living' (Doyle, 2001).

Interestingly, few authors would call sexually transmitted diseases 'lifestyle diseases', although they are clearly entirely a result of behavioural choices with none of the genetic component that plays a part in the six major lifestyle diseases identified by Doyle (2001). Sexually transmitted diseases are more usually defined as infectious diseases (ONS, 2007), an important distinction for clinicians but perhaps less so for primary care and community-based practitioners interested in public health.

In between an 'imprudent lifestyle' (Doyle, 2001) and the development of lifestyle diseases are a number of 'precursor' conditions. High cholesterol, high blood pressure and obesity are risk factors for the development of a number of the aforementioned lifestyle diseases. The distinction between these precursors, the diseases they predict and the behaviours that are associated with them is often blurred. They are often presented as diseases *per se* and interventions are prescribed by the medical profession. The Department of Health (2010) categorises high blood pressure as a cardiovascular disease. Obesity is frequently referred to using disease parameters. For instance, the phrase 'obesity epidemic' (Gard and Wright, 2005) is common and suggests that obesity is a disease and furthermore that it is somehow catching! Consequently, obesity is considered a lifestyle disease by some authors whereas others categorise it as lifestyle behaviour (Doyle, 2001).

The behaviours that are usually cited as being involved in the aetiology of lifestyle diseases are poor diet, lack of physical activity, cigarette smoking (Doyle, 2001; Blaxter, 1990; Egger *et al.*, 2011) and, increasingly, excess drinking (Burke *et al.*, 1997; Blaxter, 1990).

Sexual practices are also often described by public health professionals as health and/or lifestyle behaviours (Wardle and Steptoe, 2005). Despite not being directly linked to what clinicians refer to as lifestyle diseases, sexual practices nevertheless are still considered by most public health practitioners to be an aspect of lifestyle worthy of both concern and intervention (Egger *et al.*, 2009; Wardle and Steptoe, 2005). Furthermore, sexual practices are a clear cause of preventable and treatable diseases. Consequently, the promotion of safer sex is also included in this book.

Over the past couple of decades the unhealthy lifestyles that predominate in Western societies have been presented by the media as a new and modern crisis. Stories about drunken young women, rising levels of obesity and type 2 diabetes are no longer restricted to the health pages but frequently take the front pages of national papers and make the lead story of television news bulletins. However, it is important to recognise that people have been drinking too much and eating the wrong things for many centuries. In Victorian times there were many gin addicts and in Elizabethan times diets were poor and dangerous levels of drinking were widespread (Plant and Plant, 2006). Perhaps the main difference between then and now is the level of understanding we have. We have a better understanding of the relationship between our lifestyle and our health than previous generations. However, as long ago as Roman times, the importance of a moderate lifestyle was recognised. For example, Pythagoras suggests that 'No man, who values his health, ought to trespass on the bounds of moderation, either in labour, diet or concubinage' and Hippocrates has suggested that

Persons of a gross relaxed habit of body, the flabby, and red-haired, ought to use a drying diet ... Such as are fat, and desire to be lean, should use exercise fasting; should drink small liquors a little warm, should eat only once a day, and no more than will just satisfy their hunger'.

cited in Haslam, 2007, p. 32

The connection between obesity and angina was emphasised in 1811 by Robert Thomas who wrote:

It is found to attack men much more frequently than women, particularly those who have short necks, who are inclinable to corpulency, and who at the same time lead an inactive or sedentary life ... he should endeavour to counteract disposition to obesity, which has been considered a predisposing cause.

Thomas, 1811

It was towards the end of the eighteenth and during the nineteenth century that lifestyle approaches to health in Western societies were subsumed in the battle to control infectious diseases. Developing industrial societies and their new, crowded, urban ways of living promoted the spread of infectious diseases such as smallpox, scarlet fever, etc. (Scambler, 2008). In reality, better sanitation, nutrition and living conditions led to the decline of infectious diseases, but at the same time as these public health measures were being instigated, doctors were simultaneously starting to understand that diseases such as smallpox and measles were caused by single infectious agents. Vaccines were developed against these and people were protected from the associated diseases.

Antibiotics to treat bacterial infections were discovered and on the back of these major discoveries the biomedical principle that all disease can be traced to specific causal mechanisms emerged and dominated the practice and development of medicine over the next century (Scambler, 2008). Many would argue that the biomedical model of disease still remains the underlying principle behind the majority of medical practice in Western societies. However, in actuality, a number of models of disease and health (such as genetic, environmental and lifestyle models) influence medical practice and public health initiatives; it is just that the biomedical model usually takes prominence.

Infectious diseases have declined throughout the twentieth and twenty-first centuries and in some cases have been completely eradicated. The major health problems for modern developed societies are the chronic or so-called 'lifestyle diseases' identified by Doyle (2001). These chronic conditions are complex and cannot easily be traced to specific causal mechanisms. They are influenced at a number of levels - biologically, psychologically and sociologically. That is to say, the genes we inherit and the environment we inhabit are central to whether we go on to develop a chronic disease. Pivotal to the genetic and environmental circumstances of an individual is the way they respond to their environment and to their biological make-up. One individual may recognise that diabetes 'runs' in their family and make active choices to try to prevent it. Another with the same understanding of their family history may decide that it is inevitable that they will develop the disease and continue with damaging health choices. Similarly, one person may use smoking as a coping strategy to deal with the adverse environmental circumstances they find themselves in whereas the next may use exercise as a coping strategy. In this text we recognise that the socio-cultural circumstances in which an individual finds themselves can severely limit their lifestyle choices but we argue that usually some level of choice remains. This text explores how to encourage positive lifestyle change whilst recognising that the biological and environmental circumstances of each individual will vary enormously and have a large role to play in the degree of volitional choice each person has.

The biomedical model of disease is often characterised as curative but also has a preventative remit, albeit one that is frequently focused on vaccination or the avoidance of a specific causal organism. Chronic diseases are not generally something that you catch; rather they are a long-term response to stressors such as poor diet, lack of exercise, excess alcohol, high blood pressure, poverty or environmental hazards. Consequently, the lifestyle model of disease, first promoted by the Greeks/Romans, is once again taking precedence and influencing health policy.

A lifestyle model of disease is very focused on prevention. Lifestyle changes are clearly still pertinent once a disease is diagnosed and can slow the progress of the disease and reduce complications, but fundamentally the principle of lifestyle change is to prevent disease. This can be viewed as a threat to the medical profession and to commercial companies that make a profit from curing disease. However, lifestyle approaches have their own commercial spin-offs and the proliferation of private gyms and diet products is a visible sign of the commercial potential of a lifestyle approach to health and disease prevention.

Lifestyle approaches to health, whilst having the potential to generate profit for commercial operators, are attractive to governments because of the potential to shift the responsibility for health from the government to the individual. In this way, whilst some can see a way to profit from lifestyle approaches to health, the government can see a potential low-cost solution to healthcare. Many policy documents emphasise the role of individual choice in health-related behaviour and stress personal responsibility. There is a danger that this approach can be seen as a 'way out' for governments who can fairly cheaply provide individuals with the information they need to make informed choices about their lifestyle and leave them to get on with it. However, this is a shortsighted approach because when such tactics don't work the NHS is still 'burdened' with the job of treating people who have developed chronic diseases. Indeed, many commentators remain concerned about the lifestyle approach to disease, arguing that by emphasising individual choice the huge social factors involved in inequities in health can be ignored.

It is certainly true that early responses to the evidence that chronic diseases are influenced by behaviour did focus on knowledge-based health promotion campaigns that left the individual to resolve any behavioural flaws. However, the evidence from decades of educational health promotion is that it doesn't produce lifestyle change. Recently, public health policy makers at all levels have made position statements about expanding the medical definition of 'lifestyle' to take into account the social nature of lifestyle behaviour (Ashton and Seymour, 1988; Bruce, 1991; Hansen and Easthope, 2007). 'New public health', as it has been described, aims to discard health education initiatives in favour of enhancing people's life skills and creating supportive environments (McPearson, 1992; Ashton and Seymour, 1988). 'New public health' operates with a biopsychosocial understanding of health which requires education and lifestyle modification to be part of general public policy, the workplace and education, not restricted to health promotional campaigns (Hansen and Easthope, 2007). The lifestyle model of disease, rather than being individualistic, can at its best enable individuals to take control of their health and influence policy to enable them to do so. The importance of supportive environments in promoting behavioural change has been emphasised recently by the impressive impact of the public smoking ban on rates of heart attacks, reduced by 10 per cent in England and 14 per cent in Scotland (Nursing Times, accessed 2009).

If we are to move away from a health promotion approach to lifestyle behaviour towards developing people's 'life skills' then a sound basis in the psychology of behavioural change will be necessary. To move from providing knowledge to improving the ability to change requires a psychological approach. We need to work with people within their current socio-economic resources whilst pressurising governments to provide the resources to enable change.

As recognised by the World Health Organisation (1986), lifestyle is more than simply an individual choice. The way we live is dictated by our economic and cultural circumstances (Frieden, 2010). Indeed, the use of the term 'lifestyle change' reflects the importance of socio-demographic factors in health behaviour change rather better than the term 'health promotion'. Ethnicity, sex, age, socio-economic circumstances and cultural groups all interplay to influence the way we choose to behave (Blaxter, 1990). The evidence for socio-demographic influences on lifestyle choices is irrefutable (Craig and Mindell, 2008).

The UK government and more recently the devolved institutions of Wales, Scotland and Northern Ireland have been collecting demographic mortality and morbidity data for some time, enabling comparisons between the health of different demographic and socio-economic groups. More recently, data on physical activity, eating habits, drinking and smoking have also been included. Each of these UK institutions has commissioned surveys on a continuing basis to enable comparisons between behaviours over time and to monitor health targets. The demographic data collected in each survey includes sex, age and socio-economic class. Each of these will be explored in the coming section to detail how these demographic factors can influence health and well-being so that the healthcare professional is able to recognise and understand the influence that some of these variables exert.

Both biological sex and gender are related to health and health outcomes, but it is generally accepted that it is gender rather than biological sex that influences lifestyle choices. Indeed, the gender influence on health is primarily mediated through lifestyle choices. Many studies confuse the terms sex and gender. Sex is the biological underpinning – our genetic make-up. Gender, on the other hand, is socially constructed; it is more concerned with how we think and behave (Annandale and Hunt, 2000).

A woman born between 2008–2010 has a life expectancy of 82.3 years, a man 78.2 years (ONS, 2011a). Men and women also have different morbidity rates. For example, women are less likely to suffer from cardiovascular disease and more likely to suffer from breast cancer than men (ONS, 2007). Prostate cancer is a solely male disease as women do not have a prostate gland. Male and female differences in morbidity and mortality are influenced by biological sex (physiological and hormonal differences) but also by gender and gender role casting (Annandale and Hunt, 2000). The difference in male and female mortality rates is diminishing and this is generally held to be due to changing gender roles in Western societies rather than to biological factors, although early menarche may play a part in the rising prevalence of some female hormonally linked cancers. Unfortunately, not all gender role adaptations are positive and some of these changes in gender expectations have resulted in women adopting unhealthy, traditionally male lifestyle behaviours (Emslie et al., 2002). The influence of gender over health is mediated through the lifestyle choices that men and women make. The implications of gender roles for the various lifestyle behaviours will be developed and discussed in the relevant chapters.

Age is different from every other demographic variable in that the majority of us will experience old age. There are clear differences in health and health outcomes between different age categories and, unlike sex/gender differences, a large factor will be physiological changes over the lifespan rather than cultural expectations about age-related behaviour. Nevertheless, cultural expectations of how people of different ages should behave do play a role in the way that, for example, teenage mothers approach their pregnancies and older people participate in exercise and sport. Furthermore, despite the fact that presumably we must all hope to become older, older people experience considerable discrimination, which has implications for their health and well-being and for their lifestyle choices (Scambler, 2008). Hence, it is important to explore the impact of the cultural influences of age on lifestyle and health and this will be addressed in each of the lifestyle behaviour chapters.

Socio-economic is a broad term encompassing many variables and is assessed using a range of different factors. Social class, income, work, housing, physical and social environments have all been found to influence our health directly and also indirectly through their influence on lifestyle choices (Doyle, 2001). The definition of social class adopted by this text has been provided by the seminal Black Report (Townsend and Davidson, 1989) which first clearly stated the link between health and social class in modern society:

Segments of the population sharing broadly similar types and levels of resources, with broadly similar styles of living and (for some sociologists), some shared perception of their collective condition.

In essence, different classes have differential power to access material resources: homes, cars, white and electronic goods etc.

Explanations for behavioural choices are both contentious and politically sensitive. In 1989 Townsend and Davidson recognised that there were a number of explanations for differing levels of health in different sections of society. The key most plausible explanations are a materialist explanation and a behavioural explanation. Simply, a materialist explanation suggests that most of the class differences in health can be explained by the environmental circumstances in which individuals find themselves. A behavioural explanation suggests that most of the class differences in health can be explained by the choices that individuals make. At first sight, these explanations would seem to argue for different causes of disease but actually the distinction is more subtle. To use late-onset diabetes as an example, a behaviourist explanation would argue that a proportion of the class difference in diabetes morbidity can be explained by what individuals choose to eat. A materialist explanation does not refute the claim that diet is a major cause of late-onset diabetes but questions the degree of choice that individuals actually have about the food that they eat. Another way of framing the dichotomy is in terms of individual or collective responsibility. In the first case, the right of individuals to do as they wish with their own lives is emphasised; in the second, the inability of individuals to exert control over their environment is considered key (Blaxter, 1990). At first sight, a lifestyle model of health would appear to operate within behaviourist or individualistic explanations for lifestyle choices. However, for these authors the use of the term lifestyle behaviours rather than health behaviours is a deliberate attempt to recognise the role of socio-environmental factors in decisions individuals make about behaviours that impinge on their health. The challenge for health practitioners is to identify how to enable individuals to make positive changes to their lifestyle within the socio-economic circumstances in which they live. In other words, it is hoped that recognising that social and environmental circumstances are an integral aspect of lifestyle choice does not rule out the possibility of effective behavioural change within those parameters. Clearly, a blanket-style approach to lifestyle change is unlikely to be successful and lifestyle interventions must be tailored to the circumstances in which individuals find themselves.

One popular way of describing the role of the environment in behavioural choice is to refer to obesogenic environments. The common use of the term obesogenic environment reflects the widening acceptance of the role of factors external to the individual in the development of obesity. The complexities of what contributes to an obesogenic environment are not well understood. We know that roads and cars promote sedentary modes of travel through their ease and convenience and discourage active transport by being a danger to pedestrians and cyclists, but cars also enable people to travel to leisure activities that support health and well-being. We understand that the easy availability of high-calorie food and the increasing portion size in restaurants promote over-eating of the 'wrong' types of food but there is far greater availability of healthy food choices as well. Other factors such as shift working, alcohol and drug consumption, media output, etc. all contribute to an obesogenic environment. The key to what makes an environment obesogenic would seem to be understanding and influencing the cultural responses we make to that environment (Jones *et al.*, 2007).

Lifestyle behaviours have multiple functions; they are not simply or even primarily health focused. Lifestyle behaviours play a key role in developing and maintaining social relationships. They can be mood enhancing or a way of coping with stressful circumstances. Lifestyle behaviours are often pleasurable. Furthermore, the roles they play in our lives change during the lifespan. Lifestyle behaviours are all under some degree of volitional control, although the amount of control individuals have over their lifestyle choices is debatable and likely to vary a lot between people. The term lifestyle reflects that these are behaviours we do regularly and probably habitually. Lifestyle behaviours have the majority of their positive consequences in the present and the majority of their negative outcomes in the future. Any lifestyle behavioural change intervention consequently requires individuals to be future orientated. When you start to consider the complexity of lifestyle behaviours it becomes apparent why change is not as straightforward as it first appears.

It is true that, to some extent, the rise in chronic diseases is actually a reflection of the success of modern healthcare and social reform in that more people live long enough to experience the chronic conditions associated with old age. However, there is considerable evidence that, in addition, people take less exercise (Department of Health, 2011), drink more alcohol (HM Government, 2012), are less safe in their sexual practices (Center for Disease Control, 2007) and eat poorer diets (Fox and Hillsdon, 2007) than they did in previous recent generations. Smoking is the only lifestyle behaviour where incidence is declining, although a considerable minority of the population continue to smoke (Cancer Research UK, 2012). It is important to try to understand why unhealthy lifestyles have become so widespread, particularly since Western societies seem to be exporting these deleterious practices to developing nations (Wagner and Brath, 2011).

The lifestyles of societies are constantly evolving and will change in response to modernisation and social reform. We can see this in the different patterns of lifestyle choices in countries at different stages of modernisation and with different cultural norms (WHO, 1986). Life in modernised societies is easier and requires less physical effort than it did in previous generations (Department of Health, 2011; Fox and Hillsdon, 2007). Employment is more likely to be sedentary, housework is less demanding and far fewer people are physically active in the process of travelling. There is no evidence that people are less active in their leisure time than they were in previous generations but because the majority of physical activity is now leisure, people's total physical activity has declined (Department of Health, 2004). The increase in cheap fast-food outlets, high-calorie snacks and ready-prepared meals all contribute to the poorer diets we eat today (Myslobodsky, 2003; Blouin *et al.*, 2009). Alcohol has become considerably cheaper

than it was in previous generations and is more readily available (Plant and Plant, 2006; Babor *et al.*, 2010). Cultural acceptance of heavy drinking remains a stable facet of British life but a key change here is that it used to be unacceptable for young women to drink heavily; however, changing gender expectations are making it more acceptable for young women to match young men in their excessive drinking (Plant and Plant, 2006). It is probably in terms of sexual behaviour that cultural expectations have altered most dramatically, with sex outside marriage and children out of wedlock virtually normalised in secular society (Schubotz *et al.*, 2003). There are many positives from a more liberal attitude towards sex. It has enabled better education and communication about safe sex, empowering some women to control their sexual destinies and consequently protect themselves from sexual infection and unwanted pregnancy.

Beck (1990) coined the phrase 'risk society' to acknowledge that we live in a world where perceptions of risk are heightened, and the identification and management of risk are a major concern at all levels of society. Risk assessment in the workplace is now a legal requirement. Similarly, in schools and colleges all activities must be risk assessed, which may result in a reduction of school trips if procedures to mitigate the risk cannot be simply and cheaply instigated. Alongside risk assessment has emerged the concept of informed consent. Many professionals, health practitioners included, must ensure that they have the informed consent of an individual before embarking on a treatment programme or other intervention. All these procedures combine to create the impression that we live in a high-risk environment, when in reality we are probably safer from environmental hazards and disease than at any previous point in history. The perception of a high-risk environment is further perpetuated by the media who bombard us with 'risk' stories. Stories about crime, environmental and health risks dominate the media because they meet key news agendas in that they are negative and often sensational: 'Drinking a glass of wine a day increases your risk of breast cancer by 6%'. Lifestyle risks such as the risk of breast cancer from alcohol consumption are just some of a range of risks that we need to manage daily. For many people the best way to deal with the plethora of risk messages that they receive on a daily basis is to ignore them (Thirlaway and Heggs, 2005).

Lifestyle behaviours are embedded in daily life. There are four aspects to most people's lives: sleeping, travelling, occupation and leisure (Buckworth and Dishman, 2002). However, it is impossible to describe a typical 24 hours for someone working in the UK. The complexities of modern life in terms of work patterns and outside responsibilities mean that fewer and fewer people work a nine to five day. However, if you consider an average night's sleep to be about eight hours, the average working day to be eight hours and an average journey to and from work to be an hour then there are about seven hours left a day for leisure and/or caring and household responsibilities. Obviously, many people will take longer to travel to work, sleep for longer or less, have greater or fewer responsibilities outside of work, but most people will have some time each day that is not taken up with travelling, work, caring or sleeping. Many people do not work for longer than eight hours at a time. People in the UK work some of the longest hours in Europe and also many people work fewer but longer days each week, e.g. those in the police force and nursing. Shift work is common and it is associated with unhealthy lifestyle choices (Folkard et al., 2005; Lowden et al., 2010). Probably one of the major changes in daily living in the UK has been the huge increase in parents

with young children who work (ONS, 2011b). This means that people are busy with household responsibilities outside of work that may previously have been completed during the day. In summary, given that the physically active nature of housework and shopping has reduced (Department of Health, 2004) and that there has been a reduction in time available for physically active pursuits, it is not surprising that changes in the pattern of a 'normal' day have had consequences for both lifestyle and health.

While we are travelling we could be physically active, we could eat or smoke. However, smoking has recently been banned in all public places, including public transport vehicles, in the UK. This is the first major piece of legislation for many years that pertains to volitional lifestyle behaviour and evidence is emerging that the public ban has had a significant positive effect on heart attack rates in the UK (Nursing Times, accessed 2009). Private cars are not subject to the legislation so it is possible that the ban may encourage people to use their cars if they wish to smoke on a journey, but there is no evidence yet of this.

For the majority of people the trip to work, school or college is the most frequent journey. A minority of people take the opportunity to walk or cycle to their place of work or study but the majority will drive or use public transport. A steady decline in walking trips has been witnessed with the number of people making trips by foot 28 per cent lower in 2010 than in 1995 (Department for Transport, 2011). Factors believed to contribute to the decline of regular travel by foot or bicycle include: perceived and actual safety; the provision of facilities to segregate conflicting road users; and the proximity of local shops/workplace (Jones *et al.*, 2007). However, encouragingly evidence is starting to emerge that integrated projects to increase active transport, such as the sustainable transport towns project, can have a positive impact on walking and cycling (Sloman *et al.*, 2010).

Work and caring for relatives are the primary occupations for most people and the majority of jobs these days are predominantly sedentary (Department of Health, 2004). Similarly, most caring roles do not involve physical activity, although they can require heavy lifting. At work, most people will eat at least one meal and the quality of available food will influence the food choices. Jeffery *et al.* (2006) found no relationship between the proximity of fast-food outlets to the workplace and what people ate. There is little evidence about the influence of on-site food provision in the workplace on food choice, although the healthy workplace initiatives in Scotland (Scotland Health Improvement Agency, accessed 2009) and Wales (Welsh Assembly Government, accessed 2009) were designed to improve on-site food choice. The majority of work on on-site provision of food has been carried out with children. Previously, unhealthy food choices have dominated school food sales but the impact of new nutritional standards in schools in September 2006 is yet to be evaluated (Jones *et al.*, 2007; see Chapter 3 on eating well).

Whilst drinking alcohol at work is extremely rare, the workplace culture of drinking outside of working hours has been found to be significantly related to both drinking with work colleagues and non-work-related drinking (Delaney and Ames, 1995; Barrientos-Gutierrez *et al.*, 2007). The establishment of healthy drinking norms in the workplace could have beneficial effects for drinking both with work colleagues and more widely.

Patterns of leisure activity have changed dramatically with the development of sedentary activities such as watching television, using computers and the myriad of electronic games consoles available. The relationship between time spent in such sedentary leisure activities and reductions in time spent in physically active leisure pursuits has been, and still is, the subject of much concern, particularly in children (Department of Health, 2011). At the same time the number of health clubs and gyms has proliferated and a small increase in the proportion of people taking leisure-time physical activity has been reported (Department of Health, 2004). Television cookery programmes are popular but it would seem that watching cookery programmes rather than actually cooking is the popular leisure pursuit! Other popular leisure activities such as going to the cinema are associated with unhealthy food availability and large portion sizes. Similarly, recent studies have highlighted the increase in portion sizes of meals served in restaurants (Steenhuis and Vermeer, 2009). Hence, leisure activities themselves can lead to an increase in unhealthy lifestyles.

#### Conclusion

The world we live in is both the safest yet and a highly risky place, and probably the biggest risk to health, for most people, is the lifestyle choices that they make. However, most of us continue to be concerned about dramatic risks such as aeroplane crashes, but continue to ignore the far more likely risks associated with a lifetime of smoking, eating and drinking too much and remaining sedentary. Education has little impact on people's failure to respond to risk. Choices about eating, drinking, smoking or physical activity are possible, although not for everyone in every context. Enabling choice, supporting choice, empowering choice is what all health practitioners want to achieve, and understanding how best to do this is what this book is about.

#### **Key points**

- The major lifestyle diseases are coronary heart disease, stroke, lung cancer, colon cancer, diabetes and chronic obstructive pulmonary disease.
- Unhealthy lifestyles have arisen as a response to modern society.
- We understand the risks associated with unhealthy lifestyle behaviours probably better than at any other time in history but still fail to make appropriate changes to our behaviour.
- Lifestyle change is more difficult for some people than others, depending on their socio-demographic and environmental circumstances.
- Lifestyle behaviours are complex, which makes instigating change similarly complex and difficult.

#### **Discussion points**

• The success of the ban on smoking in public places has made some commentators suggest that we should ban certain types of unhealthy food. What are the complications involved in banning certain foodstuffs?

- To what extent should lifestyle change be an individual choice or imposed on people through policy and legislation?
- Practising an unhealthy lifestyle is more common in people living in deprivation. How can we make healthy lifestyles more accessible to all?

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# 2

## Health promotion

#### Learning objectives

At the end of this chapter you will:

- understand health promotion, health improvement, health education and health literacy
- recognise the challenges of providing an equal opportunity to everyone to improve their health
- recognise who is responsible for the delivery of health promotion in the UK
- appreciate the challenges and complexities involved in delivering health improvement and health promotion interventions
- have evaluated some of the available health improvement and health promotion interventions in the UK.

#### Case study

Jemma is a primary school teacher working in a school in the suburbs of a large city. Over the past few years Jemma has become increasingly concerned about the health and fitness of the children in her school. Very few children walk to school, the majority are dropped off in a car. She is aware that there are a sizeable number of children who do not enjoy their P.E. lessons and do not participate in physical activity at playtime. Another concern is the diet of the children in the school. In a recent school project about food many reported disliking most fruit and vegetables and refused to try any during the project.

Jemma and her colleagues in the school would like to try to promote healthy eating and physical activity in their school. Jemma has been tasked with exploring what support there is in their area for promoting healthy eating and physical activity. She has been asked to draw up a proposal to present to the school governors. Jemma is now looking for advice from the local public health team and the local education authority about what interventions might be feasible for the school to adopt.

#### Introduction

The World Health Organisation (WHO) in 1986 defined health promotion as 'The process of enabling people to increase control over, and to, improve, their health' (WHO, 2009, p. 3).

So there are two elements to health promotion: the *process* of empowerment and the *aim* of improving health. In theory the process of empowerment leads to improvements in health but we need to recognise that this is based on the assumption that individuals and communities wish to improve their health. The WHO Ottawa Charter for Health Promotion in 1986 identified five health promotion action areas:

- Build health public policy
- Create supportive environments
- Develop personal skills
- Strengthen community action and
- Re-orient health services.

Health promotion is about improving the health of communities as a whole and of the individuals within those communities. Communities can be defined by their geographical or their demographic characteristics. So a particular city council may decide to promote active transport in their city and target all the inhabitants. Alternatively a charity such as Diabetes UK may decide to promote walking to the diabetic community. Often the aim may to be reach a particular community of individuals but the intervention may be at the level of the community, individualised or indeed a combination of both types of strategies.

It is important to recognise that health promotion, for the WHO, should be focused on reducing health inequalities. At the 1988 WHO International Conference on Health Promotion a target to reduce health inequalities by 25 per cent by the year 2000 was set: 'By the year 2000 the actual differences in health status between countries and between groups within countries should be reduced by at least 25% by improving the level of health of disadvantaged nations and groups' (WHO, 2009, p. 7).

This focus on reducing health inequalities through health promotion is reflected in the mission statements of all the four UK government bodies responsible for health promotion: Public Health England, Public Health Wales, Health Scotland and Public Health Agency Northern Ireland (Department of Health, 2011; Public Health Wales, accessed 2012; Health Scotland, accessed 2012; Public Health Agency, Northern Ireland, accessed 2012). For example the mission of Public Health England is: To protect and improve the health and well-being of the population, and to reduce inequalities in health and wellbeing outcomes

DoH, 2011, p. 1

Public Health Wales states that:

Our purpose is to give people power to protect and improve health and well-being and reduce inequities by informing, advising and speaking up for them.

Public Health Wales, accessed November 2012

Scotland and Northern Ireland in their policy documents and mission statements give a similar emphasis to reducing health inequalities. It is therefore sobering to reflect that, instead of reducing health inequalities through our health promotion policies, strategies, interventions and practice over the past three decades the evidence suggests we have made no inroads on health equalities and in some areas inequalities may be widening. A recent report from the Department of Health in England (Department of Health, 2009a) suggested that the health inequalities between the most affluent and the most deprived have not improved. The Chief Medical Officer in Scotland in 2010 (Scottish Government, 2011) reported a similar picture of at best no improvement and at worst a widening of health inequalities. In the most recent report, which is from Wales in 2011, the Chief Medical Officer reported a slight widening of health inequalities as measured by life expectancy and healthy life expectancy (Welsh Government, 2012). Indeed it has been argued that rather than reducing health inequalities health promotion interventions can increase them. Those who are more affluent and have a higher level of formal education are more likely to modify their diets, give up smoking and increase levels of physical activity than are the less affluent with lower levels of formal education (Buck and Frosini, 2012). In 2012 Buck and Frosini in a report for the Kings Fund reported that whilst engagement with unhealthy lifestyle behaviours was decreasing overall, these reductions have been seen mainly among those in higher socio-economic and educational groups. They found that people with no qualifications were more than five times as likely as those with higher education to engage in all four *poor* behaviours in 2008, compared with only three times as likely in 2003.

Health promotion is not solely or even predominantly focused on lifestyle behaviours but also includes issues such as: accident prevention, road safety, immunisation against infectious disease, food safety, support for individuals with learning disabilities to live in the community and supporting patients in adhering to medical advice and treatments (WHO, 2009). Health promotion has previously been described as having two main activities (Shriven *et al.*, 2010):

- 1. Providing services for people who are ill or who have a disability and
- 2. Positive health activities which are about personal, social and environmental changes aimed at preventing ill health, developing healthier living conditions and lifestyles.

However, this distinction is increasingly redundant and creates an artificial divide between people who are disabled or have a diagnosis of an illness and those who are currently free from disability or a diagnosed condition. Having a disability doesn't necessarily lead to ill health and many people with disabilities are interested in preventing ill health and leading healthy lifestyles (Kroll *et al.*, 2006). Similarly, many people with a diagnosed chronic condition would describe themselves as healthy and be committed to preventing any deterioration of their health (Hobbis *et al.*, 2011). Individuals with type 2 diabetes are a good example of this. They have a diagnosis of an illness that in itself may not impact on their quality of life particularly during the early stages (Department of Health, 1999). Indeed, it may require no medical treatment and may be managed solely through lifestyle modification. However, they are a community who are at high risk of developing other associated diseases that arise from the damage that high levels of circulating blood glucose can cause to cells (see Chapter 10 on special conditions) and are an important group for health promotion to target as many health gains are possible through lifestyle modification (Department of Health, 1999).

Health promotion is a complex activity and clarity about its precise meaning and the role of related activities such as health education, health improvement, health protection and health prevention are not consistently defined or understood. The WHO in 2012 described health promotion as involving the combination of health education activities and the adoption of healthy public policies and their diagrammatic representation of the relationship between the major health concepts is a useful starting point for understanding what health promotion involves (WHO, 2012).

#### Health improvement

Later in this chapter it is argued that public health works in three areas: health improvement, service improvement and health protection and that health promotion is involved in all three areas. The focus of this book, which is lifestyle behaviours, is very clearly health improvement. However, across the UK the words promotion and improvement are used inter-changeably with the public health body in Scotland, Health Scotland, describing itself as Scotland's health improvement agency. It is clear though that lifestyle behavioural change could deliver improvements in health and longer life expectancy whereas other more protective health promotion activities such as vaccination schemes are more about maintaining health.

#### Health education

Health education activities are a central strategy to achieve the goals of health promotion. Health education has been defined by the WHO (2012) as 'Consciously constructed opportunities for learning involving some form of communication designed to improve health literacy, including improving knowledge and developing life skills which are conducive to individual and community health.'

Health education, at its broadest and best, involves educational, motivational, skillbuilding and consciousness-raising techniques (Figure 2.1). However, too often it is solely educational and too focused on communicating risks and benefits which are now

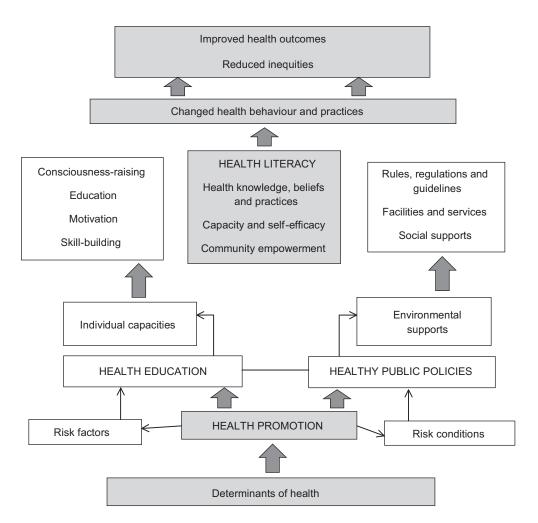


Figure 2.1 Relationship between major health concepts (adapted from WHO, 2012)

well established to have little influence on lifestyle change (Thirlaway and Upton, 2009; Whitehead, 2001). As discussed in the introductory chapter of this book, decades of health education and risk communication focused interventions have not delivered the targeted changes in lifestyle behaviours that governments required. As argued by the WHO (2012), health education should not be limited to the dissemination of health-related information. Its purpose should not only be to increase knowledge about personal health behaviour but also to develop skills that enable individuals and communities to engage in activities that address the psychological, behavioural, social, economic and environmental determinants of their health. As such the concept of health education is far broader than many lay, and indeed professional, interpretations of education.

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